

A NEW SPECIES OF PYGMY *DROSERA* FROM WESTERN AUSTRALIA
AND A NOTE ON THE STATUS OF SECT. *BRYASTRUM* AND
SECT. *LAMPROLEPIS*

Martin Cheek

Royal Botanic Gardens, Kew, Richmond, Surrey, TW9 3AE, U.K.

ABSTRACT

Drosera mannii Cheek, a species widely known in cultivation as *Drosera* 'Bannister' since 1977 or earlier, is described. This opportunity is taken to re-evaluate the widely maintained distinction between *Drosera* sect. *Bryastrum* Planch. and *Drosera* sect. *Lamprolepis* Planch.

KEY WORDS: *Drosera*, Droseraceae, taxonomy, Australia.

The preparation of accounts of the cultivated species of *Drosera* for the European Garden Flora Project and the Royal Horticultural Society's new *Dictionary of Gardening* (both in prep.) prompted a critical examination of several taxa of pygmy *Drosera* of West Australian origin which lack species epithets and are known solely by cultivar names based on the locality from which they were collected. Many of these have been widely cultivated in Europe and North America since the late 1970's. The first time that these were discussed was apparently by Rose (1977), who mentioned 9 such taxa: 'Toodyay Pink,' 'Mt. Manypeaks,' 'Mucnea Pink,' 'Regan's Ford,' 'Lake Badgerup' (misprinted as 'Lake Badgebup'), 'Bannister,' 'Walyinga,' 'Brookton' and 'North Beermullah.' Slack (1979: 219) expounds upon the cultivation of many of these and others ('Millbrook Road' and 'Moora'), and it is clear that even then, several were well known in cultivation in Europe. Two additional cultivars, 'Gidgeganup Pink' and 'Gidgeganup White' were discussed by Lowrie (1980) and their introduction attributed to Rose. Although all these taxa seem to have been considered as putative new species by Rose (1977), investigation has shown that this is not so for all of them. *Drosera* 'Gidgeganup Pink' for example, is clearly only a pink strain of *Drosera scorpioides* Planch. and should be cited as *D. scorpioides* 'Gidgeganup Pink.' However, some of these taxa do seem to represent distinct species which are unaccounted for in the recent treatment of the genus in the *Flora of Australia* (Marchant, *et al.* 1982). Subsequently, one of these taxa ('Regan's Ford') has been described by Strid (1987) as *D. rechingeri*, but the bulk of the taxa are still botanically

unaccounted for. Although it is not possible, owing to lack of materials, to properly assess all of these taxa, it is plain that at least one of those still in widespread cultivation in Europe and America, described by both Rose (1977) and lengthily by Slack (1979) is undoubtedly specifically distinct. Accordingly, it is described as new here.

Drosera mannii Cheek, *sp. nov.* TYPUS: AUSTRALIA. West Australia: Cheek 2064 (HOLOTYPUS: K; Isotypi: PERTH,CANB,P).

Drosera 'Bannister' S. Rose, Carn. Pl. Newsl. 6(1):11. 1977.

A *Drosera leucoblata* Bentham stylis 5 vel 6, stigmatibus sub-obclavatis, petalorum unguibus 1 mm et laminis retusimissis dif-fert.

Herbaceous, carnivorous, rosulate perennial. Stem short, unbranched, erect, base surrounded by marcescent leaves and stipules. Roots 3-7, wiry, largely adventitious, 0.2 mm thick and ca 5 cm long, dull red or orange above, straw coloured below with 5-11 lateral branches and numerous black, fine hairs ca 1.5 mm long. Leaves numerous, leaf blade elliptic, ca 2.5 mm long, 2 mm wide, concave in T.S., distal glandular hairs ca 4 mm long, proximal hairs ca 2 mm long, underside glabrous; petiole 3.5-4 mm long, 0.5-1 mm broad in plane view, dorsiventrally flattened, glabrous; stipules not detaching easily with the petioles from the stem, 3.5-4 mm long, 1 mm wide at the base, dividing ca 1.5 mm from the base into 3 main teeth, each spreading, triangular, 2 mm long with a lacinate margin, membranous-chartaceous, hyaline. Inflorescences 1-2, the sterile part 7-10 cm long, sub-glabrous, with extremely few, scattered, randomly directed, appressed white hairs, the upper 5-8 mm glandular hairy, the whole flushed dark red; fertile part 3-8.5 cm long, bearing up to 32 flowers, glandular hairy. Flowers 12-15 mm across, ascending. Sepals 5, ovate-elliptic, 2.5 mm long, 2 mm broad, acute-obtuse, very finely toothed, outer surface with red glandular hairs. Petals 5(-6-7), imbricate; petal blade oblong-obovate, 5-7(-8) mm long, 4.5-6 mm wide, apical notch 1 mm deep, the base truncate, palest pink (R.H.S. colour chart 'red-purple group' 62D), with a very thin red margin; petal stalk ca 1 mm long, broadest at tip, green. Stamens 5(-6) ascending; filaments 2.5-3 mm long, 0.25 mm wide at apex (which confluent with the connective), tapering to the base, white; anthers ca 0.3 mm long, with 2 separate thecae, inserted obliquely on either side of the swollen connective, purple; pollen orange. Ovary ca 0.75 mm diam, white. Styles 5-6(-7), 2 mm long, filiform. Stigma obconical to obclavate, 1.25 mm long, 0.5-0.75 mm wide, translucent white, style insertion ventral and oblique, 0-5 mm from base. Fruits with pedicels recurved, seeds unknown.

WESTERN AUSTRALIA: *ex cult.*, 1984 Adrian Slack from plants originally found by Phillip Mann at the side of the Bannister road, southwestern W. Australia, Cheek 2064 (HOLOTYPE: K; Isotypes: PERTH,CANB,P).

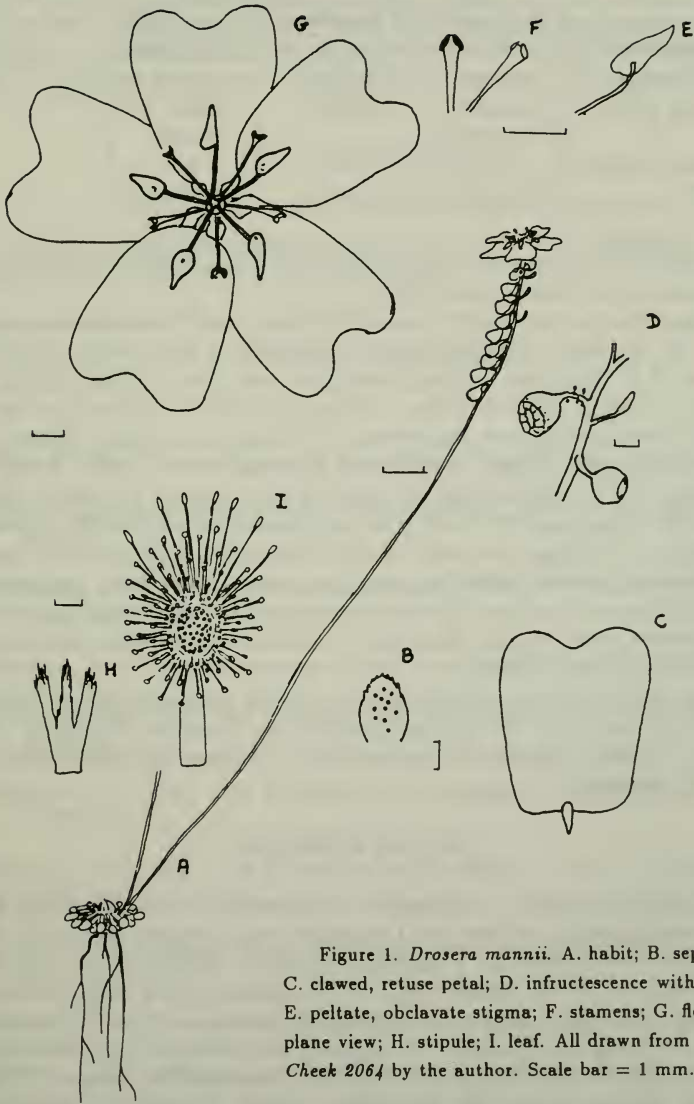


Figure 1. *Drosera mannii*. A. habit; B. sepal; C. clawed, retuse petal; D. infructescence with bract; E. peltate, obclavate stigma; F. stamens; G. flower in plane view; H. stipule; I. leaf. All drawn from Cheek 2064 by the author. Scale bar = 1 mm.

TABLE 1: Characters distinguishing *D. mannii*, *D. leucoblata* and *D. pulchella*.

	<i>D. mannii</i>	<i>D. leucoblata</i>	<i>D. pulchella</i>
Petiole breadth	1-0.75 mm	<0.5-0.75 mm	1-2.25 mm
Petal apex	retuse	entire	entire
Stigma shape	obconical -obclavate	filiform	filiform to clavate
Stigma number	5-6	3-5	4-5
Fruits	descending	descending	ascending

HABITAT. In pine leaf mould on the edge of pine forests, on damp creek-sides and in wet hollows (Rose 1977).

The curious and absolutely distinctive stigmas that characterize this species were first and aptly described (as 'boat-shaped') by Rose (1977), in his discussion of *D. 'Bannister.'* A long description was given by Slack (1979) who placed it near *D. pulchella* Lehm. Although it shares with that species unusually broad petioles and pink flowers, it is clearly more closely related to *D. leucoblata* Benth. Indeed, in the key of Marchant, *et al.* (1982), it keys out to couplet 70, but falls midway between the two opposing statements, having styles 2 mm long, scape 9-15 cm. It is readily distinguished from *D. leucoblata* Benth. by its stigmas (probably the most important single source of specific and sectional characters in the genus) and emarginate petals, and from *D. pulchella* Lehm. which also has comparatively wide petioles and occasionally pink flowers, by these same characters. The differences between these taxa are elucidated further in Table 1.

The species is widely cultivated, being readily propagated, predominantly from the small, disc like gemmae produced in December (Northern Hemisphere). A single inflorescence can produce a succession of flowers from June to early September.

Sectional delimitation

Planchon's sectional classification of *Drosera* divided the perennial, gemmae forming pygmy sundews into two groups: sect. *Lamprolepis* Planch., with 8 species characterized by 5 stamens, 3-5 styles, inflorescences many flowered and leaves rarely peltate, and sect. *Bryastrum* with a single species, *D. pygmaea* DC., characterized by tetramerous flowers, 4 styles, inflorescences single flowered, leaves peltate. *D. pygmaea* was maintained as distinct from section *Lamprolepis* by Marchant (1982), but in view of the nature of *D. occidentalis* Morrison (1912), *D. 'Lake Badgerup'* and *D. 'Warriup,'* the value of maintaining this distinction seems dubious. *D. occidentalis* has 1-2 flowered inflorescences with pentamerous flowers having 4-5 styles. *D. 'Lake Badgerup'*

usually has 1 flowered inflorescences, but occasionally produces up to 7 flowers per scape, the flowers being 4-5-merous, with 4 or 5 styles. *D.* 'Warriup' is unflowered, is pentamerous, with 3 styles. While it is true that all 3 have peltate leaves, this character also occurs in species of section *Lamprolepis*, for example, *D. pulchella* Lehm. In short, on present evidence, it seems best to place *D. pygmaea* in the same section as the remainder of the pygmy sundews.

ACKNOWLEDGMENTS

I am very grateful to Melanie Thomas for help with the diagnosis and to David Hunt for comments on the manuscript.

LITERATURE CITED

- Diels, L. 1906. Droseraceae in A. Engler (Ed.), *Das Pflanzenreich* 26: 1-136.
- Lowrie, A. 1980. Another look at *Drosera* species. *Carn. Pl. Newsl. Austral.* 5:4.
- Marchant, N.G., H.I. Aston & A.S. George. 1982. Droseraceae in *Flora of Australia* 8:9-66.
- Morrison, A. 1912. New and rare Australian plants. *J. Bot.* 50:164-168.
- Planchon, J.E. 1848. Sur la famille des Droséracées. *Ann. Sci. Nat. Bot.* 9:79-99.
- Planchon, J.E. 1848. Sur la famille des Droséracées. *Ann. Sci. Nat. Bot.* 9:185-207.
- Planchon, J.E. 1848. Sur la famille des Droséracées. *Ann. Sci. Nat. Bot.* 9:285-309.
- Rose, S. 1977. Seeking the pygmy droseras. *Carn. Pl. Newsl.* 6(1):10-11 and figs. 10.1-10.4.
- Slack, A. 1979. *Carnivorous Plants*. Ebury Press, London (138-141 and 219).
- Strid, A. 1987. New species of *Beaufortia* and *Chamaelaucium* (Myrtaceae), *Drosera* (Droseraceae) and *Pultenaea* (Fabaceae) from S.W. Australia. *Pl. Syst. Evol.* 155:343-345.